

FINAL REPORT

ST. CHARLES PLANNING COMMISSION

YAGGY COLBY ASSOCIATES

ST. CHARLES MARKET ANALYSIS

ECONOMIC ANALYSIS

The a first step in undertaking the economic analysis of the City of St. Charles is to determine the basic employment sectors within Winona County and the City of St. Charles. This is most commonly done by the Location Quotient Method, which is utilized to determine the extent to which various local industries contribute to the economic basis of the County or City. The Location Quotient Method uses a statistical indexing technique to determine the extent to which an industry contributes to the economic base of an area. This is accomplished by comparing industry specific employment levels as a percentage of local employment to the percentage of employments levels of a larger geographic region, usually the national economy. It requires an initial calculation of location quotients by North American Industrial Classification System (NAICS) Code, which are then used to estimate basic economic activity by sector and overall employment in the basic sector.

As listed here and shown in Graph 1 and Table 1 below, there are three basic employment sectors for St. Charles in 2010:

- Other Services
- Education and Health Services
- Trade Transportation and Utilities

Note: A quotient of 1.0 or greater is needed for an industry sector to be considered a basic sector in the local economy.

As you can see in Graph 1, the Location Quotients have been calculated for 2000 and 2010. The number of basic sectors did change between 2000 and 2010 with manufacturing and construction falling below basic sector status from 2000 to 2010. The Quotient's for the remaining basic employment sectors did also fluctuate, but did not fall below basic sector status, which indicates that there are cross currents in the economy that need to be understood to have an effective economic development strategy.

This information will help to provide a context in which to analyze the basic sector employment for the City of St. Charles. It is also interesting to note that the there is one sector, Leisure and Hospitality, that is a near basic sector for the City. This sector has a location quotient of 0.9044 and is close to achieving a quotient of 1.0 or greater, which would mean that this industry within the City of St. Charles could begin serving a larger geographical area than the city and draw in more revenue in this category than would leave the city. Also, if we look further into the data and investigate the Location Quotients for more specific Sector and Subsector Categories we find more specific examples of near basic sector industries:

Sector or Subsector

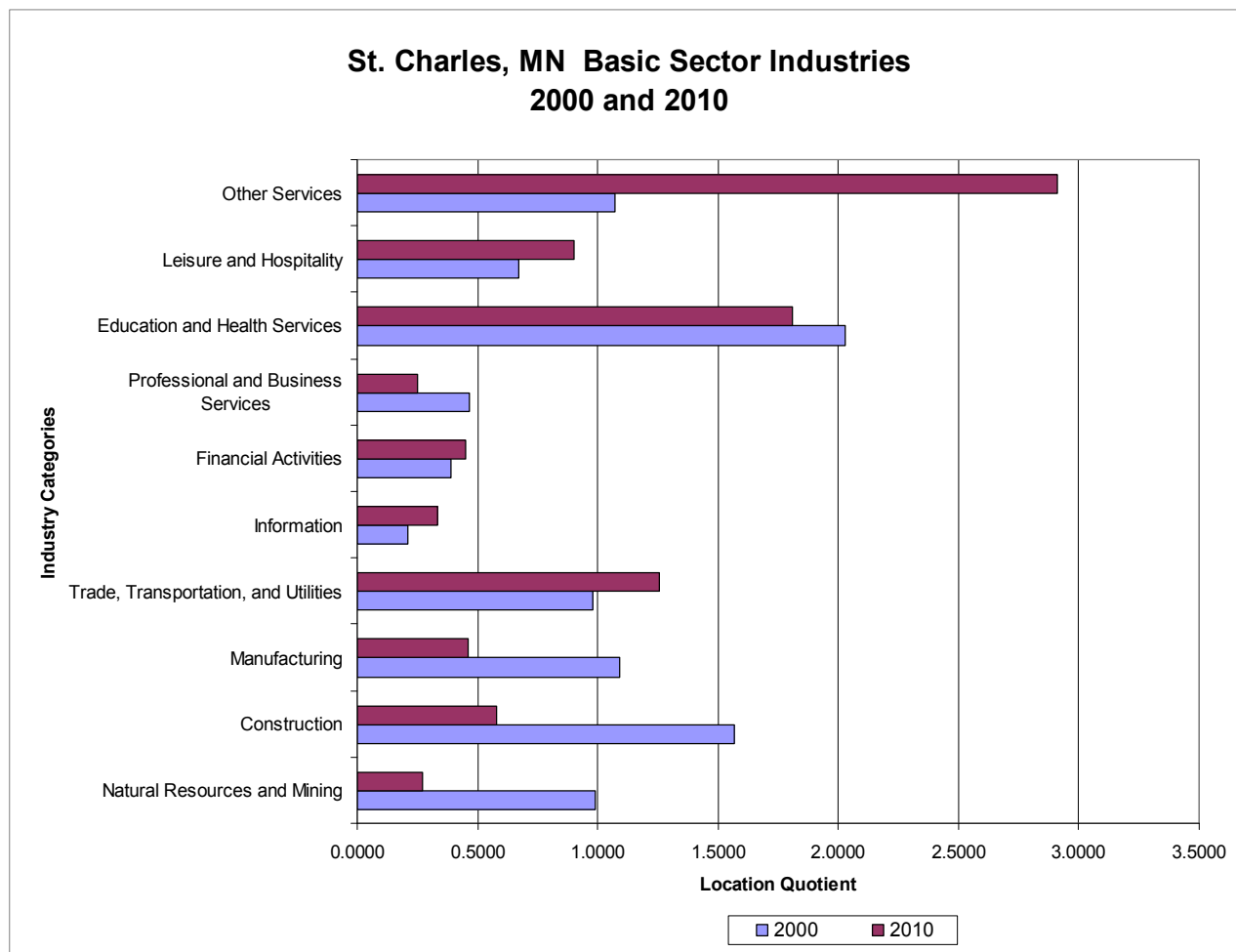
- Retail Trade (near Basic Sector)
- Arts Entertainment and Recreation

2010 Location Quotient

0.9725

0.9044

A more complete listing of the Sector and Subsector Industries and their data is contained in Table 1 below.

Graph 1

Source: U.S. Census and Department of Labor, calculations done by West Consulting

Note: A quotient of 1.0 or greater is needed for an industry sector to be considered a basic sector in the local economy.

By analyzing the basic sector industries and their employment more closely, we are able to determine the number of basic sector employees in St. Charles and Winona County. As shown in Table 1 below, there were 335 basic sector employees in 2000 and 362 in 2009; however, it should be noted that the total employment in the City declined from 1,748 in 2000 to 1,300 in 2010, a reduction of 448 jobs. The objective in determining the basic sector employment in addition to total employment is to assist in calculating the multiplier effect that basic sector employment can on the local job base. This multiplier effect is known as the “Economic Base Multiplier” or EBM and for 2010 the EBM was 3.6. So, for each basic sector job that is created in St. Charles, 3.6 additional jobs are created.

Table 1

St. Charles, MN				
Basic Sector Employment Analysis 2000 - 2010				
Industry Category	2000		2010	
	Location Quotient	Basic Employees	Location Quotient	Basic Employees
Base Industry: Total, all industries	1.0000	335	1.0000	362
Natural Resources and Mining	0.9898	0	0.2725	0
Construction	1.5694	62	0.5804	0
Manufacturing	1.0914	24	0.4622	0
Trade, Transportation, and Utilities	0.9777	0	1.2533	76
Information	0.2089	0	0.3323	0
Financial Activities	0.3909	0	0.4525	0
Professional and Business Services	0.4673	0	0.2493	0
Education and Health Services	2.0297	245	1.8085	185
Leisure and Hospitality	0.6735	0	0.9044	0
Other Services	1.0703	5	2.9112	102

Table 2

St. Charles, MN				
Employment Analysis by Sector 2000 - 2010				
	Local Area Employment	Employment	Employee Change	% Change
Industry Category	2000	2010	2000-2010	2000-2010
Base Industry: Total, all industries	1,748	1,300	-448	-25.63%
Natural Resources and Mining	27	6	-21	-77.78%
Construction	170	39	-131	-77.06%
Manufacturing	286	65	-221	-77.27%
Trade, Transportation, and Utilities	401	375	-26	-6.48%
Information	12	11	-1	-8.33%
Financial Activities	48	41	-7	-14.58%
Professional and Business Services	122	51	-71	-58.20%
Education and Health Services	482	413	-69	-14.32%
Leisure and Hospitality	128	144	16	12.50%
Other Services	72	155	83	115.28%
Unclassified	NC	0	0	0.00%

A change in the value of the Location Quotient means that the employment the particular sector is growing or declining. As shown in Table 2 above, overall, total employment in St. Charles declined from 1,748 in 2000 to 1,300 in 2010, a reduction of 448 jobs. However, given the

complex nature of the economy both growth and decline can be occurring in different sectors at the same time. The employment changes can be analyzed to determine which sectors of the local economy are growing.

In order to understand what is occurring, we need to look more closely at the change in the level of employment in each of these sectors for 2000 and 2010, and what were the causes of the change. This type of analysis is called Shift-Share Analysis. The purpose of this technique is to take the change in employment for an area and divide it into the three areas that caused the change:

- The National Growth Component
- The Industrial Mix Component
- The Competitive Share

As part of the scope of work for the market analysis for the city, we will look at the competitive share component of the employment base. The competitive share is the remaining employment change after accounting for the national and industrial mix components. A positive competitive share component number for any job sector would indicate that city has a productive advantage in that sector, and this advantage could be due to local firms having superior technology, management, market access, or a local labor force having higher productivity or lower wages.

By determining the basic sector industries in the community and the one in which there is a local competitive advantage, this allows the city to market to that industrial sector with more potential for success. Also, this information can assist the city in structuring its available parcels and regulations that more appropriate accommodate that industry sector.

In further analyzing the Industry Subsectors within Winona County, the following Subsectors indicated potential competitive advantages. Within these Subsectors there was a positive growth in the jobs attributable to the Competitive Share component for that industry, even though the total job growth may have been negative.

Industry Subsector	<u>2000 to 2010</u>	
	Competitive Share Job Growth	Total Job Growth
• Animal Production	132	149*
• Specialty Trade Contractors	101	(5)
• Primary metal manufacturing	139	(75)*
• Fabricated metal product manufacturing	130	(59)*
• Wholesalers, durable and non-durable goods	47	288
• Computer and electronic manufacturing	950	(104)*
• Health and Personal Care Stores	181	20
• Gasoline Stations	461	5
• General Merchandise Stores	1,791	211*
• Credit information businesses	851	76

The Subsectors listed above with an “*” next to the “Total Job Growth for the decade indicate that this Subsector was also determined to be a “Basic Sector” as determined by the Location

Quotient method. A copy of the Shift-Share Analysis for Winona County is included in Appendix 1.

Drive Time Analysis/Market Area

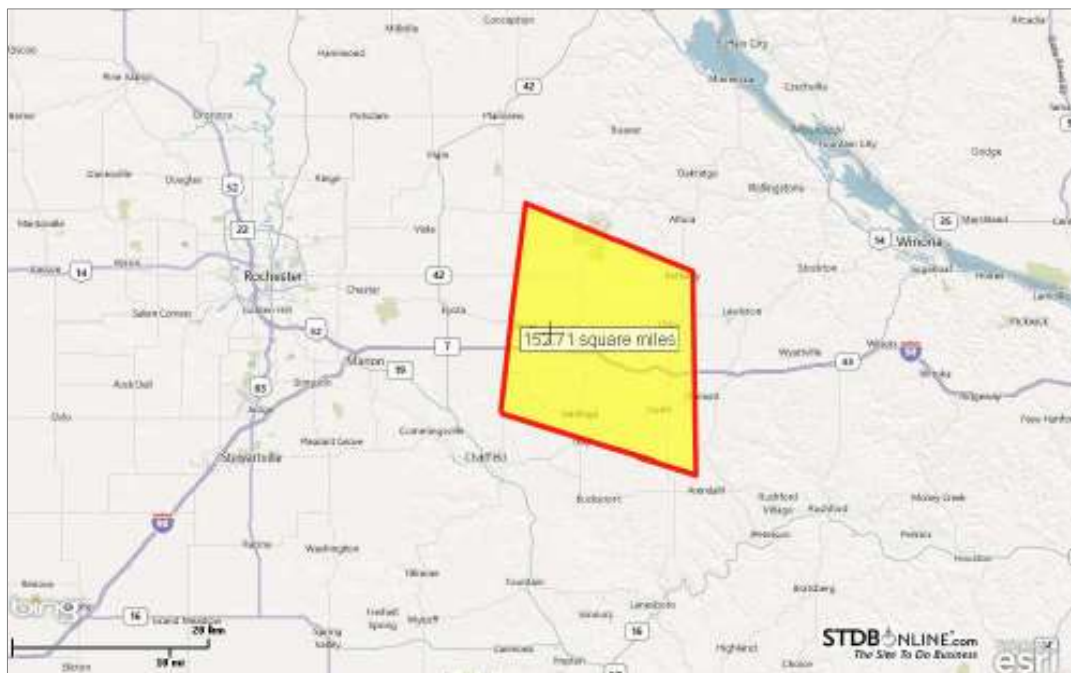
From the 2010 U.S. Census we know that the population of St. Charles was 3,735; however, the city does serve a larger trade area than the city limits. There is a technique called Reilly's Law of Retail Gravitation, which can be used to estimate the City's trade area. Table 3 below, calculates the size of the trade area base on this technique by estimating the breakpoint of the trade area in miles from St. Charles, and the map below represents this trade area graphically. The population within this trade area is 6,568.

Knowing the size of the trade area and the population in the trade area, it is possible to determine if there is sufficient population for a variety of types of businesses. For example, it can be estimated from demographic data from the National and State level that a pharmacy on average requires a population based of approximately 7,000 to 8,000 people or that a health and beauty care store needs a population of 3,400 to 3,800. Of course, this data would need to be analyzed at the county, city and trade area level to be more specific, but it does reveal how an analysis can be conducted in order to determine any unmet needs or market niches in a community.

Table 3
St. Charles, Minnesota
Trade Area Analysis

City	Miles from St. Charles	Population	Breakpoint Miles from St. Charles
Eyota	8.99	1,977	5.20
Plainview	18.67	3,340	9.60
Lewiston	10.46	1,620	6.31
Rushford	27.93	1,731	16.62
Chatfield	13.59	2,779	7.30
St. Charles		3,735	

St. Charles, Minnesota Trade Area



A detailed Retail MarketPlace Profile is contained in Appendix 2. This profile provides a more detailed look at the retail demand and supply within the trade area for St. Charles. The following industry groups are shown to have a surplus of retail sales, which means that customers are drawn in from outside the trade area:

- Other Motor Vehicle Dealers
- Home Furnishings Stores
- Lawn and Garden Equipment and Supply Stores
- Beer, Wine, and Liquor Stores
- Florists
- Used Merchandise Stores
- Direct Selling Establishments
- Drinking Places

These businesses bring income to the trade area from outside the trade area. The other businesses listed in the 2010 Retail MarketPlace Profile have a leakage of retail sales, which means that customers are leaving the trade area to purchase these goods and services. This leakage could be a retail opportunity for an existing business to expand or for a new business to start-up to meet this demand. A specific business would need to conduct a more detailed analysis to determine its specific trade area needs and competition before proceeding; however, this analysis indicates possible industry groups to explore.